

ROTOSTAR AQUA 441 SILVER 3504-62

Version	Revision Date:	SDS Number:	Date of last issue: 11/25/2024
5.2	03/31/2025	102000026949	Date of first issue: 03/26/2018

SECTION 1. IDENTIFICATION

Product name : ROTOSTAR AQUA 441 SILVER 3504-62
Product code : 046520CM0

Manufacturer or supplier's details

Company name of supplier : ECKART America Corporation
Address : 830 East Erie Street
Painesville OH 44077
Telephone : 866-458-7837
(440) 954-7600
Telefax : (440) 354-6224
e-mail adresse : info.eckart.america.oh@altana.com
Emergency telephone : **CHEMTREC:** 800-424-9300
CHEMTREC: 1-703-527-3387 (International)

NCEC:

(contract no. ECKART29003-NCEC)
US: +1 866 928 0789 (Toll free)
Canada: +1 800 579 7421 (Toll Free)
Mexico: +52 55 5004 8763

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Skin sensitization : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements : **Prevention:**
P261 Avoid breathing mist or vapors.
P272 Contaminated work clothing must not be
allowed out of the workplace.
P280 Wear protective gloves.

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Response:

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.

Disposal:

P501	Dispose of contents/ container to an approved waste disposal plant.
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Hazardous ingredients which must be listed on the label:

5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous ingredients**

Chemical name	CAS-No.	Concentration (% w/w)
Aluminum	7429-90-5	$\geq 10 - < 20$
2-Propanol	67-63-0	$\geq 1 - < 5$
5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-	126-86-3	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	: Take the victim into fresh air. Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.
If inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing.

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If swallowed	:	If eye irritation persists, consult a specialist. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	May cause an allergic skin reaction.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry sand ABC powder Foam
Unsuitable extinguishing media	:	Water Carbon dioxide (CO ₂)
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment.
General advice	:	The product should not be allowed to enter drains, water courses or the soil. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for	:	Use mechanical handling equipment.

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containment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Do not flush with water.
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Earthing of containers and apparatuses is essential.
Take measures to prevent the build up of electrostatic charge.
Use explosion-proof equipment.
Store in original container.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not store near acids.
Do not store together with oxidizing and self-igniting products.
Keep away from oxidizing agents and strongly acid or alkaline materials.
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Components	CAS-No.	Value type (Form of	Control parameters /	Basis
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		exposure)	Permissible concentration	
Aluminum	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-3
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (respirable fraction)	5 mg/m3	OSHA Z-3
		TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH
		TWA	5 mg/m3 (Aluminum)	NIOSH REL
		TWA (Total)	15 mg/m3 (Aluminum)	OSHA P0
		TWA (Respirable fraction)	5 mg/m3 (Aluminum)	OSHA P0
		TWA (total dust)	15 mg/m3 (Aluminum)	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3 (Aluminum)	OSHA Z-1
		TWA (Total dust)	15 mg/m3 (Aluminum)	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3 (Aluminum)	OSHA P0
		TWA (welding fumes)	5 mg/m3 (Aluminum)	NIOSH REL
		TWA (pyro powders)	5 mg/m3 (Aluminum)	NIOSH REL
		TWA (Respirable particulate	1 mg/m3 (Aluminum)	ACGIH

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		matter)		
		TWA (Fumes)	5 mg/m3	OSHA P0
		TWA (powder)	5 mg/m3 (Aluminum)	OSHA P0
2-Propanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA P0
		STEL	500 ppm 1,225 mg/m3	OSHA P0

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-Propanol	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

Hand protection
Material : Solvent-resistant gloves (butyl-rubber)

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be

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washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection	:	Goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	silver
Odor	:	characteristic
Odor Threshold	:	No data available
pH	:	6 - 8 Concentration: 100 %
Melting point/ range	:	Not applicable
Boiling point/boiling range	:	> 100 °C
Flash point	:	> 100 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative density	:	No data available
Density	:	1.1 - 1.2 g/cm3
Solubility(ies)	:	
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Total Volatile organic compounds (VOC) content	:	1.00 - 5.00 %

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Contact with acids and alkalis may release hydrogen. Stable under recommended storage conditions.
Conditions to avoid	:	Do not allow evaporation to dryness. No data available
Incompatible materials	:	Acids Bases Oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Components:**2-Propanol:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Components:**2-Propanol:**

Result: Eye irritation

5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-:

Result: Irreversible effects on the eye

Respiratory or skin sensitization**Skin sensitization**

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

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Components:**5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-:**

Result: The product is a skin sensitizer, sub-category 1B.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

Components:**2-Propanol:**

Assessment: May cause drowsiness or dizziness.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

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Further information

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****5-Decyne-4,7-diol, 2,4,7,9-tetramethyl-:**

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 1

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. In accordance with local and national regulations.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**Domestic regulation****49 CFR**

Not regulated as a dangerous good

International Regulations

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IATA-DGR

Not permitted for transport

IMDG-Code

Not regulated as a dangerous good

Remarks : Due to the risk of hydrogen development we recommend to refrain from airfreighting this/these product(s).

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)
Ethanamine, N,N-diethyl-	121-44-8	5000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Respiratory or skin sensitization

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Aluminum	7429-90-5	>= 10 - < 20 %
2-Propanol	67-63-0	>= 1 - < 5 %

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

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2-Propanol	67-63-0	>= 1 - < 5 %
1,2-Propanediol	57-55-6	>= 0.1 - < 1 %
White mineral oil (petroleum)	8042-47-5	>= 0.1 - < 1 %
Ethanol, 2-phenoxy-	122-99-6	>= 0.1 - < 1 %

Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
 This product does not contain any priority pollutants related to the U.S. Clean Water Act
 The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Ethanamine, N,N-diethyl-	121-44-8	%
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The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Ethanamine, N,N-diethyl-	121-44-8	%
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US State Regulations**Massachusetts Right To Know**

Aluminum	7429-90-5
2-Propanol	67-63-0

Pennsylvania Right To Know

Water	7732-18-5
Polyurethane/polyurea polymer	Not Assigned
Aluminum	7429-90-5
Dextrin	9004-53-9
2-Propanol	67-63-0
Ethanol, 2-phenoxy-	122-99-6
Ethanamine, N,N-diethyl-	121-44-8

California Prop. 65

WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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California List of Hazardous Substances

Aluminum	7429-90-5
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2-Propanol	67-63-0
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California Permissible Exposure Limits for Chemical Contaminants

Aluminum	7429-90-5
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2-Propanol	67-63-0
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The ingredients of this product are reported in the following inventories:

DSL : This product contains one or several components listed in the Canadian NDSL.

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

ACGIH	: USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	: ACGIH - Biological Exposure Indices (BEI)
NIOSH REL	: USA. NIOSH Recommended Exposure Limits
OSHA P0	: USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	: USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	: 8-hour, time-weighted average
ACGIH / STEL	: Short-term exposure limit
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA	: 8-hour time weighted average
OSHA P0 / STEL	: Short-term exposure limit
OSHA Z-1 / TWA	: 8-hour time weighted average

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OSHA Z-3 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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